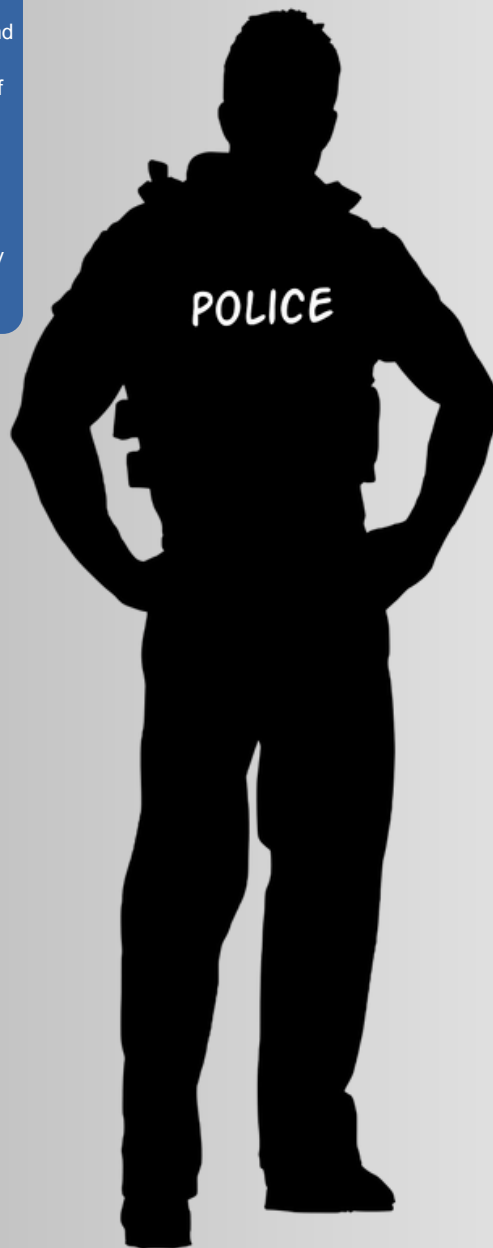


Medical Implications of available Personal Protective Equipment



PAVA Spray (Pelargonic Acid Vanillylamide)

- Respiratory Irritation: May cause coughing and difficulty breathing
- Eye Irritation: Intense burning and watering of the eyes, potential temporary blindness
- Skin Reactions: Causes intense burning on the skin
- Allergic Reactions: Rarely, subjects may experience anaphylactic reactions
- Psychological Impact: The distress caused by PAVA can lead to panic



ASP Baton (Armament Systems and Procedures)

- Contusions and Bruising: Significant bruising or hematomas
- Fractures: Potential for broken bones
- Internal Injuries: Blows to the torso can cause damage to internal organs
- Head Trauma: Strikes to the head or neck can cause concussions, skull fractures, traumatic brain injuries
- Nerve Damage: Blows to certain areas may cause nerve damage or paralysis



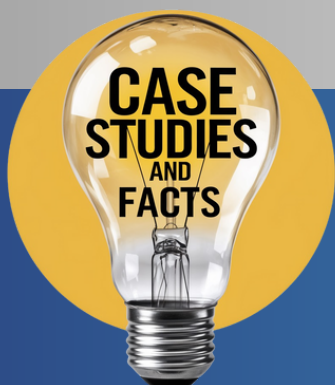
TASER

- Cardiac Effects: Risk of inducing abnormal heart rhythms (arrhythmias)
- Muscle Contractions: Intense, involuntary muscle contractions
- Skin Burns and Puncture Wounds: Localized burns or puncture wounds
- Nerve Damage: Rarely, the Taser can cause localized nerve injury
- Seizures: In rare cases, Taser use can precipitate seizures



The Glove (Conductive Distraction and De-escalation Device)

- Muscle Contractions: May cause involuntary muscle contractions - temporarily lasting
- Psychological Impact: The shock may cause fear, or anxiety in subjects
- Temporary Incapacitation: The subject may lose balance



Case study Taser - Raymond Abbey (UK, 2022) - The fall after being tasered caused Abbey to suffer significant head trauma, which led to severe brain injuries

45,907 assaults on police officers were recorded in the UK in the year leading up to March 2024. That equates to an average of 125 officers attacked per day.

Case study Asp - Eric Estavillo (California, 2016) - The strike was delivered to his head, causing severe injury. Estavillo suffered from a skull fracture and traumatic brain injury

Serious offences against prison officers are up 10% on last year. Some 750 of those assaults are deemed to be serious, and 23 attacks are being recorded every day on the prison estate across England and Wales.